

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A nucleic acid detection method comprising:  
fixing a cell-containing sample directly on divided compartments of a support;  
pre-treating the sample to enable amplification of nucleic acids contained in the sample;  
performing PCR by placing a PCR mixture, containing primers for amplifying a target nucleic acid, into the compartments of the support; and  
determining whether amplified nucleic acids in a PCR solution contain the target nucleic acid.
2. (Canceled)
3. (Currently amended) The nucleic acid detection method as set forth in claim 1, wherein the ~~nucleic acid exposing~~ pre-treating step is performed by one or more methods selected from the group consisting of a detergent treatment method, an enzyme treatment method, and a heat treatment method.
4. (Canceled)
5. (Previously Presented) The nucleic acid detection method as set forth in claim 1, wherein the amplified nucleic acids are labeled in the step of performing PCR.
6. (Previously Presented) The nucleic acid detection method as set forth in claim 5, wherein, in the determining step, the nucleic acids amplified and labeled in the step of performing PCR are used as probes for complementary hybridization with known gene fragments.
7. (Previously Presented) The nucleic acid detection method as set forth in claim 6, wherein the known gene fragments are fixed on the support in advance.
8. (Previously Presented) The nucleic acid detection method as set forth in claim 5, wherein, in the determining step, the nucleic acids amplified and labeled in the step of performing PCR are used as probes for a DNA microarray.

9. (Previously Presented) The nucleic acid detection method as set forth in claim 1, wherein the sample originates in biological sources.

10. (Previously Presented) The nucleic acid detection method as set forth in claim 9, wherein the biological sample originates in humans.

11-18. (Canceled)

19. (Currently amended) The nucleic acid detection method as set forth in claim 1, wherein the support with the divided compartments is shaped to fit a gene amplifier for PCR ~~(thermal cycler)~~.

20. (Previously Presented) The nucleic acid detection method as set forth in claim 1, wherein, in the determining step, the target nucleic acid is detected by electrophoresis.